DAMES & MOORE

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September 6, 1996

Catellus Resources Group
201 Mission Street
San Francisco, California 94105

Attention:

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Mr. Jim Adams

Director, Environmental Services

Report

Phase II Investigation Central Property

Parcels CA03701233, 234, 235, 236, and 237

Santa Fe Springs, California

Dames & Moore Job No. 14858-123-042

1.0 INTRODUCTION

Dames & Moore is pleased to submit this Phase II Investigation report regarding the above referenced property (Figure 1) to Catellus Development Corporation (Catellus). This project was conducted in accordance with the scope of services and terms and conditions described in the proposals dated March 22 and July 18, 1996 between Dames & Moore and Catellus. This report may be relied upon by Catellus, its lenders, and potential buyers or leaseholders of the property.

This project involved tasks completed to evaluate the subsurface conditions on the Central property in Santa Fe Springs, California (site or subject property). The property consists of five parcels of land totaling approximately 10 acres bounded by Sorenson Avenue on the west, Burke Street to the north, Spicer's Paper to the east, and the Sorenson Drainage Channel to the south. For the purpose of identification, this site has been referred to as the Central Property.

Site history has been documented in previous reports prepared by Dames & Moore. From approximately 1928 through the 1940's, the western portion of the Central Property was occupied by a bulk above ground storage facility. From the 1940's through the early 1960's, the property was used for agriculture. General Motors constructed a new car preparation facility onsite in 1963. Chrysler Corporation acquired the new car preparation facility in 1965 and operated onsite until 1988. All of the structures associated with Chrysler's operations were demolished and the property is currently vacant. Adjacent parcels to the north and northeast have been investigated and redeveloped. Aerial photographs and facility maps show the western portion of the Central

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Property to have mainly been used as an asphalt paved parking lot from 1963 through 1988. Portions of three buildings were located on the western portion of the Central Property: Building D-Traffic Control. Building E-Production Control/Port Operations, and Building I-Carwash B. Buildings D and E were used for administrative purposes and did not directly involve car maintenance and preparation. Building I was used as a carwash and had an associated clarifier. Buildings formerly located on the eastern portion of the Central Property included: Building H-Carwash A and Auto Detail, Building G-Body Work, Clarifier CL-2, Building J-Paint Building, Buildings K and L-Parts, Mechanical Warranty and Service, Building M-Tune-up, the Service Pit building, two unlabeled structures, underground tanks T-3 and T-5, and clarifiers CL-4 and CL-5.

The vicinity of clarifier CL-2, the paint building, and the body work building have been investigated in the past by Converse Environmental and Dames & Moore. Following the investigation, solvent affected soils were excavated from the vicinity of the clarifier in 1991. Dames & Moore installed wells GW-13 and GW-14 adjacent to the former clarifier in 1994.

Groundwater throughout the site and vicinity has been sampled several times over the past four years and has been found to be impacted by volatile organic compounds (VOCs) that appear to originate from offsite sources.

Based on past history and previous investigations. Dames & Moore proposed evaluation of site soils and groundwater for the presence of VOCs and total petroleum hydrocarbons (TPH).

2.0 PURPOSE AND SCOPE OF SUBSURFACE INVESTIGATION

The purpose of the investigation program described herein was to evaluate the current onsite soil and groundwater conditions at several locations on the property for the presence of VOCs and TPH. We understand that Catellus may use the results of this investigation to obtain financing for the property. To accomplish this objective, Dames & Moore performed the tasks described below.

- O Prepared a site specific Health & Safety Plan for the field investigations described herein.
- O Conducted a utilities clearance survey (Geophysical Survey) to help located buried pipelines, electrical lines and other subsurface obstructions within the area to be explored. Dames & Moore also contacted Underground Services Alert (USA) to help establish the approximate location of subsurface utilities within the area to be explored.
- Advanced and sampled 41 soil borings (SB-1 through SB-41) to approximately 20 feet below ground surface (bgs) throughout the property (Figure 2). Eight of the borings were located at random throughout the western portion. The rest of the

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borings were performed in the former locations of onsite buildings, clarifiers, and underground tanks.

- Analyzed the soil samples from 5, 10, and 15 feet bgs for TPH fuel scan by EPA modified Method 8015 and VOCs by EPA Method 8260.
- Collected three soil samples (SS-1, SS-2, and SS-3) from approximate depths of one foot from an existing soil stockpile on the eastern portion of the property.
- Analyzed the three soil samples for TPH fuel scan by EPA modified Method 8015 and VOCs by EPA Method 8260.
- Measured the depth to groundwater in the onsite monitoring wells (GW-2, GW-8, GW-13 and GW-14) and wells on the adjacent Catellus properties (MW-1, GW-4, GW-9, GW-11, and GW-12.
- Calculated the direction of groundwater flow based on depth to groundwater measurements. Well elevations are already known.
- Sampled groundwater from the four onsite monitoring wells and the five wells on adjacent properties and analyzed the groundwater samples for VOCs by EPA Method 8260.
- Logging of boreholes and soils classification following the Unified Soil
 Classification System (USCS) by an onsite geologist.
- Prepared this report describing the investigation performed, summarizing our field observations, data analysis, and recommendations for further action as appropriate.

3.0 FIELD PROCEDURES

3.1 HEALTH AND SAFETY PLAN

In accordance with OSHA regulations, a site-specific Health & Safety Plan was developed for the field investigations described herein. All field personnel were required to implement the procedures presented in this document while conducting onsite field work.

3.2 LOCATING SUBSURFACE OBSTRUCTIONS

Prior to conducting any drilling, Underground Service Alert (USA) was contacted to assess the location of underground utilities. In addition to the service provided by USA, Dames & Moore

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utilized a geophysical survey services company to provide additional information regarding underground pipelines, electrical lines, and other subsurface metallic obstructions within the immediate area of the proposed borings.

3.3 DRILLING AND SOIL SAMPLING

Dames & Moore personnel performed soil sampling at the property on June 25-26, 1996 and July 24-26, 1996. Groundwater was estimated to be encountered between 21 and 25 feet bgs. Depth to groundwater in the monitoring wells was found to range from 17.46 to 22.33 feet bgs. The soil borings were generally terminated at 20 feet bgs. Soil sampling was accomplished using a truck-mounted direct push rig (Geoprobe). An onsite geologist logged the borings, classified the soils and noted observations such as odors or discolored soil.

Relatively undisturbed soil samples were collected beginning at five feet and at five-foot intervals thereafter to the base of the boring. The samples were collected by hydraulically pushing a steel sampler lined with an acetate sleeve into the soil at the desired sample depth. Following retrieval, the exposed soil on the end of each sleeve were covered with Teflon sheeting and fitted with plastic end caps. Sample labels were fixed onto the sides of the containers and contained the following information: boring number, sample number, depth, collector name, sample location, date and time of collection. Sealed and labeled samples were cooled in the field in an ice chest and shipped by Dames & Moore under standard chain-of-custody to Centrum Analytical Laboratories, Inc., a California EPA-certified analytical laboratory.

Down-hole drilling equipment was steam cleaned prior to drilling each boring. Prior to soil sampling, samplers were washed in a dilute non-phosphate detergent solution, triple rinsed in fresh and then distilled water, and air dried.

Soil samples were screened in the field for organic vapor emissions using a portable photoionization detector (PID). Field screening was performed to provide information regarding the presence of VOCs in soil samples and as a health and safety monitoring tool. Soil from the sampler bit was placed in a resealable plastic bag and sealed. The soil was then mixed and shaken in the bag to volatilize organic compounds that may have been present, and the field instrument was then inserted into the bag to record detectable concentrations of organic vapors. The field instrument was calibrated at the beginning of each day using isobutylene as a calibration gas.

3.4 MONITORING WELLS

On June 28 and July 1, 1996, Dames & Moore personnel measured the depth to groundwater and collected groundwater samples from wells MW-1. GW-2, GW-4, GW-8, GW-9, GW-11, GW-12, GW-13, and GW-14. Static water level was measured in each monitoring well using an electric water level indicator. Water level data was recorded to the nearest 0.01 foot. Before

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and after each use, the measurement device was washed in a non-phosphate detergent solution and thoroughly rinsed in deionized water.

Each well was purged of approximately three casing volumes of groundwater using a downhole pump. During pumping, the water temperature, conductivity, and pH were monitored periodically and recorded. The downhole pump was decontaminated between each well by washing in a phosphate-free detergent and triple rinsing with tap water followed by distilled water. Once the wells recharged, they were sampled using dedicated bottom-opening, precleaned bailers.

Groundwater samples were collected and placed into appropriate containers for analytical testing. For quality control of the field procedures, a trip blank was submitted with the samples. Sample labels were fixed onto the sides of the containers and contained the following information: well number, sample number, collector name, sample location, date and time of collection. Each labeled container was kept cool in an ice chest, and shipped by courier to the analytical laboratory under proper chain-of-custody procedures by Dames & Moore.

3.5 LABORATORY ANALYSIS

Soil samples from the 41 borings from depths of 5, 10, and 15 feet bgs were analyzed for TPH fuel scan using EPA Method 8016 and VOCs using EPA Method 8260. The three samples from the soil stockpile were analyzed for TPH fuel scan using EPA Method 8016 and VOCs using EPA Method 8260.

The nine groundwater samples and trip blank were analyzed for VOCs using EPA Method 8260. All analyses were performed by Centrum Analytical Laboratories, Inc., a California EPA certified laboratory.

4.0 RESULTS

4.1 SOIL

Soils at the site were found to consist predominantly of silt and silty sand. A two to three foot thick clayer lens was encountered at approximately 10 feet bgs in the borings closest to Sorenson Avenue. The surface was relatively level, graded soil that is occasionally disked to control weeds. Boring logs are included as Appendix A. Boring locations are shown on Figures 2, 2A, and 2B. Groundwater was not encountered in the boreholes during the investigation.

Soil samples were analyzed for TPH by modified EPA Method 8015 and for VOCs by EPA Method 8260. Analytical results for the soil samples are summarized in Tables 1 and 2. Laboratory data sheets are included as Appendix B.

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TPH was detected in one sample, boring B-26 at six feet bgs at a concentration of 22 milligrams per kilogram (mg/Kg) and characterized as motor oil. TPH was not detected in any of the other 123 samples analyzed from the boreholes and the soil stockpile.

Very low concentrations of VOCs were detected in eleven of the 41 borings. Tetrachloroethene (PCE) was the most commonly detected (13 samples) at concentrations ranging from 0.001 to 0.023 mg Kg. 4-methyl, 2-pentanone was also detected in several samples (four samples) at concentrations ranging from 0.005 to 0.008 mg/Kg. The other VOCs were detected randomly and do not appear to be related to former or current onsite conditions. The VOC concentrations detected (including PCE) would not require remediation.

Other VOCs detected in only one soil sample each included:

2-butanone (methy ethyl ketone) 0.007 mg/Kg benzene 0.001 mg/Kg naphthalene 0.003 mg/Kg

PCE is present in groundwater beneath the site and in the site vicinity, and the presence of low concentrations of PCE in many of the soil samples is likely related to its presence in groundwater.

4.2 GROUNDWATER

Groundwater samples from nine wells were analyzed for VOCs using EPA Method 8260. The data (summarized in Table 3 and present on Figure 3) indicates the presence of several VOCs. The VOCs most commonly detected in groundwater samples include: chloroform, 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethene (1,2-DCE), trichloroethene (TCE), trichlorofluoromethane (TCFM), and PCE. Laboratory data are included as Appendix C.

Based on water level measurements, groundwater flows in a southerly direction across the site. The data indicate that groundwater in upgradient monitoring wells has been impacted by the same VOCs as those in downgradient wells. During this monitoring event, concentrations of VOCs (most notably PCE) were higher in the upgradient wells. There is no indication that the groundwater contamination results from an onsite source and it is our opinion that the VOCs detected in onsite monitoring wells are due to offsite sources. This opinion is consistent with groundwater data collected by Dames & Moore in 1991/1992 and 1994. The previous data is shown on Figures 4 and 5.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the above described investigation, Dames & Moore makes the following conclusions and recommendations regarding the subject property:

TPH was detected in only one of 127 soil samples. VOCs were detected in limited soil samples at low concentrations. The lack of a pattern to the samples in which VOCs were detected and the low concentrations indicates that TPH and VOCs should not be a concern for future development of the property.

The VOCs present in groundwater appear to emanate from upgradient offsite sources.

Dames & Moore does not recommend additional soil investigations of this property for the presence of TPH and VOCs at this time.

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Dames & Moore appreciates the opportunity to be of assistance to Catellus. If you have any questions or comments, please contact the undersigned.

Sincerely,
DAMES & MOORE

Debra B. Stott, R.G. Senior Geologist

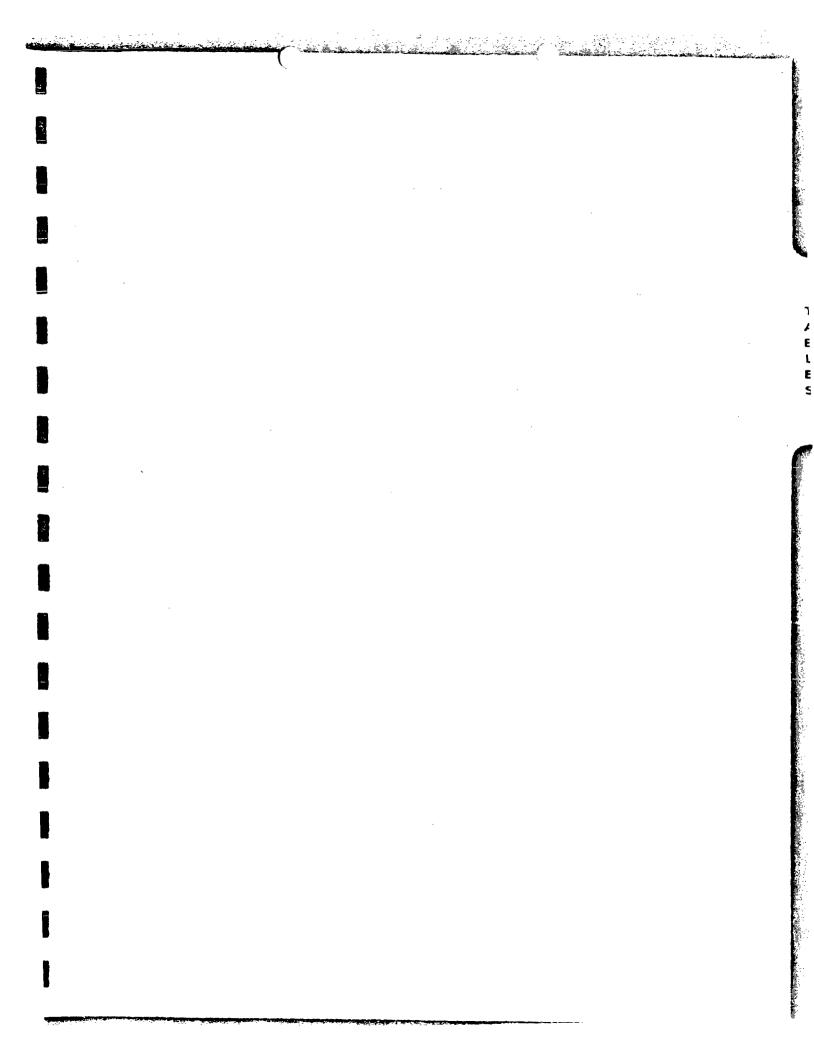


TABLE 1 - ANALYTICAL RESULTS - SOIL, PARCELS 235, 236, 237

SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-1-5	5	ND	ND	ND
SB-1-10	10	ND	ND	ND
SB-1-15	15	ND	ND	ND
SB-2-5	5	ND	ND	ND
SB-2-10	10	ND	ND	ND
SB-2-15	15	ND	ND	ND
SB-3-5	5	ND	ND	ND
SB-3-10	10	ND	ND	ND
SB-3-15	15	ND	ND	ND
SB-4-5	5	ND	ND	2-butanone, 0.007
SB-4-10	10	ND	ND	ND
SB-4-15	15	ND	ND	naphthalene, 0.004 PCE. 0.001
SB-5-5	5	ND	ND	benzene, 0.001
SB-5-10	10	ND	ND	ND
SB-5-15	15	ND	ND	ND
SB-6-5	5	ND	ND	ND
SB-6-10	10	ND	ND	ND
SB-6-15	15	ND	ND	ND
SB-7-5	5	ND	ND	ND
SB-7-10	10	ND	ND	ND
SB-7-15	15	ND	ND	ND

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SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-8-5	5	ND	ND	ND
SB-8-10	10	ND	ND	ND
SB-8-15	15	ND	ND	ND
SB-9-5	5	ND	ND	ND
SB-9-10	10	ND	ND	ND
SB-9-15	15	ND	ND	ND
SB-10-5	5	ND	ND	ND
SB-10-10	10	ND	ND	ND
SB-10-15	15	ND	ND	ND
SB-11-5	5	ND	ND	ND
SB-11-10	10	ND	ND	ND
SB-11-15	15	ND	ND	ND
SB-12-5	5	ND	ND	ND
SB-12-10	10	ND	ND	PCE, 0.001
SB-12-15	15	ND	ND	ND
SB-13-5	5	ND	ND	ND
SB-13-10	10	ND	ND	ND
SB-13-15	.15	ND	ND	ND

TPH analyses using modified EPA Method 8015

mg/Kg

milligrams per kilogram

PCE

tetrachloroethene

ND

not detected

TABLE 2 - ANALYTICAL RESULTS - SOIL, PARCELS 233, 234

SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-14-5	5	ND	NA	ND
SB-14-10	10	ND	NA	ND
SB-14-15	15	ND	NA	PCE, 0.001
SB-15-5	5	ND	NA	ND
SB-15-10	10	ND	NA ·	ND
SB-15-16	16	ND	NA	ND
SB-16-5	5	ND	NA	ND
SB-16-10	10	ND	NA	ND
SB-16-16	16	ND	NA	PCE, 0.002
SB-17-5	5	ND	NA	ND
SB-17-10	10	ND	NA	ND
SB-17-15	15	ND	NA	ND
SB-18-5	5	ND	NA	ND
SB-18-10	10	ND	NA	ND
SB-18-15	15	ND	NA	ND
SB-19-5	5	ND	NA	ND
SB-19-10	10	ND	NA	ND
SB-19-15	15	ND	NA	ND
SB-20-5	5	ND	NA	ND
SB-20-10	10	ND	NA	ND
SB-20-15	15	ND	NA	ND

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SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-21-5	5	ND	NA	ND
SB-21-10	10	ND	NA	ND
SB-21-15	15	ND	NA	ND
SB-22-5	5	ND	NA	PCE, 0.002
SB-22-10	10	ND	NA	PCE, 0.002
SB-22-15	15	ND	NA	ND
SB-23-5	5	ND	NA	ND
SB-23-10	10	ND	NA	PCE, 0.003
SB-23-15	15	ND	NA	PCE, 0.023
SB-24-5	5	ND	NA	ND
SB-24-10	10	ND	NA	4M2pent, 0.005
SB-24-15	15	ND	NA	naphthalene, 0.003 PCE, 0.009
SB-25-5	5	ND	NA	ND
SB-25-10	10	ND	NA	ND
SB-25-15	15	ND	NA	ND
SB-26-6	6	22 motor oil	NA	ND
SB-26-10	10	ND	NA	PCE, 0.002
SB-26-15	15	ND	NA	PCE, 0.002
SB-27-5	5	ND	NA	ND
SB-27-10	10	ND	NA	ND
SB-27-15	15	ND	NA	PCE, 0.001
SB-28-5	5	ND	NA	ND
SB-28-10	10	ND	NA	ND

SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-28-15	15	ND	NA	ND
SB-29-5	5	ND	NA	ND
SB-29-10	10	ND	NA	ND
SB-29-15	15	ND	NA	ND
SB-30-5	5	ND	NA	ND
SB-30-10	10	ND	NA	ND
SB-30-15	15	ND	NA	ND
SB-31-5	5	ND	NA	4M2pent, 0.008
SB-31-10	10	ND	NA	ND
SB-31-15	15	ND	NA	ND
SB-32-5	5	ND	NA	ND
SB-32-10	10	ND	NA	ND
SB-32-15	15	ND	NA	4M2pent, 0.007
SB-33-5	5	ND	NA	ND
SB-33-10	10	ND	NA	ND
SB-33-15	15	ND	NA	ND
SB-34-5	5	ND	NA	ND
SB-34-10	10	ND	NA	ND
SB-34-15	15	ND	NA	ND
SB-35-5	5	ND	NA	ND
SB-35-10	10	ND	NA	ND
SB-35-15	15	ND	NA	PCE, 0.001
SB-36-5	5	ND	NA	ND
SB-36-10	10	ND	NA	ND

SAMPLE	DEPTH (ft)	TPH extractable (mg/Kg)	TPH gasoline (mg/Kg)	VOCs (mg/Kg) EPA 8260
SB-36-15	15	ND	NA	ND
SB-37-5	5	ND	NA	ND
SB-37-10	10	ND	NA	ND
SB-37-15	15	ND	NA	ND
SB-38-5	5	ND	NA	ND
SB-38-10	10	ND	NA	ND
SB-38-15	15	ND	NA	ND
SB-39-5	5	ND	NA	ND
SB-39-10	10	ND	NA	ND
SB-39-15	15	ND	NA	ND
SB-40-5	5	ND	NA	ND
SB-40-10	10	ND	NA	ND
SB-40-15	15	ND	NA	ND
SB-41-5	5	ND	NA	ND
SB-41-10	10	ND	NA	ND
SB-41-15	15	ND	NA	ND
SS-1-1	1	ND	NA	4M2pent, 0.005
SS-2-1	1	ND	NA	ND
SS-3-1	1	ND	NA	ND

TPH analyses using modified EPA Method 8015

mg/Kg

milligrams per kilogram

PCE

tetrachloroethene

4M2pent

4 methyl 2 pentanone

ND

not detected

NA

not analyzed

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TABLE 3 - GROUNDWATER ANALYSIS EPA METHOD 8260

WELL NO.	Elevation feet msl	depth to GW	GW elevation	VOCs (ug/L)
MW-1	143.75	17.46	126.29	PCE, 1.4 TCE, 2.7
GW-2	148.02	21.59	126.43	PCE, 25 TCE, 66 TCFM, 22 benzene, 4.7 chloroform, 0.6 1,1-DCE, 8.5 1,2-DCE, 0.8
GW-4	147.52	19.40	128.12	ND
GW-8	146.55	19.08	127.47	PCE, 23 TCE, 8.1 TCFM, ND benzene, ND chloroform, ND 1,1-DCE, ND 1,2-DCE, 0.6
GW-9	148.01	19.20	128.81	PCE, 1600 TCE, 310 TCFM, ND benzene, 0.6 chloroform, ND 1,2-DCA, 0.9 1,1-DCE, 20 1,2-DCE, 24
GW-11	147.32	20.08	127.24	ND

WELL NO.	Elevation feet msl	depth to GW	GW elevation	VOCs (ug/L)
GW-12	149.85	22.33	127.52	PCE, 300 TCE, 88 TCFM, ND benzene, 2.2 chloroform, ND 1.2-DCA, 1.2 1,1-DCE, 29 1,2-DCE, 28
GW-13	147.27	21.14	126.13	PCE, 52 TCE, 70 TCFM, 35 benzene, ND chloroform, 2.2 1,1-DCE, 13 1,2-DCE, 1.0
GW-14	147.68	21.35	126.33	PCE, 50 TCE, 73 TCFM, 34 benzene, 1.5 chloroform, 0.8 1,1-DCE, 12
trip blank				ND

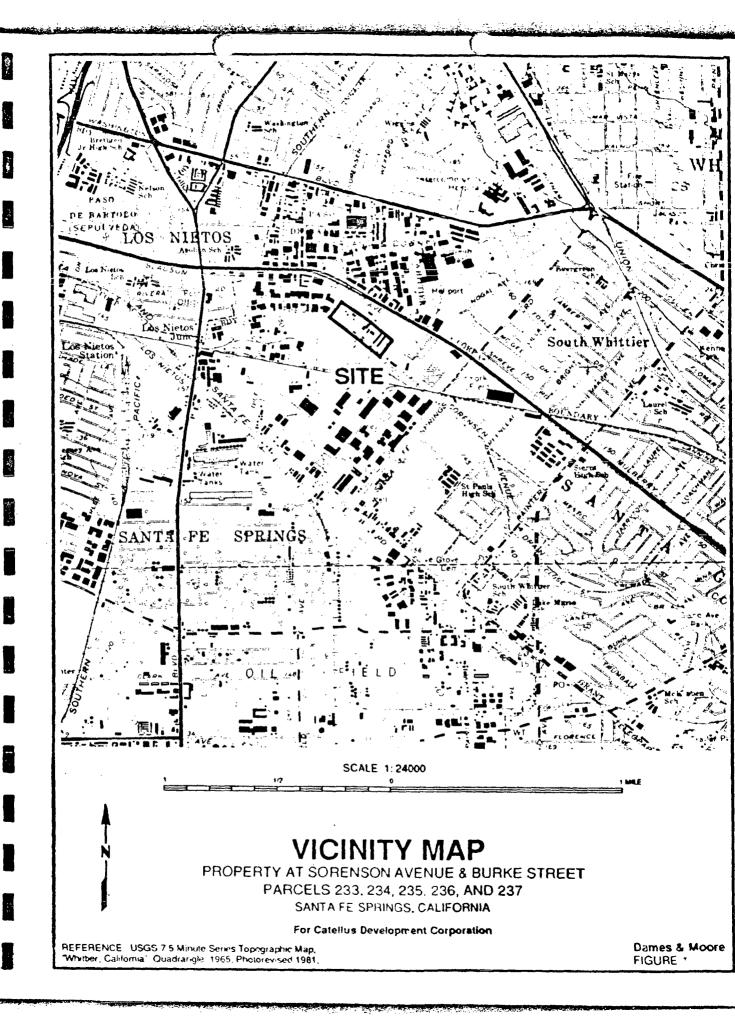
Groundwater elevations measured June 28, 1996 and July 1, 1996 Groundwater samples collected June 28, 1996 and July 1, 1996

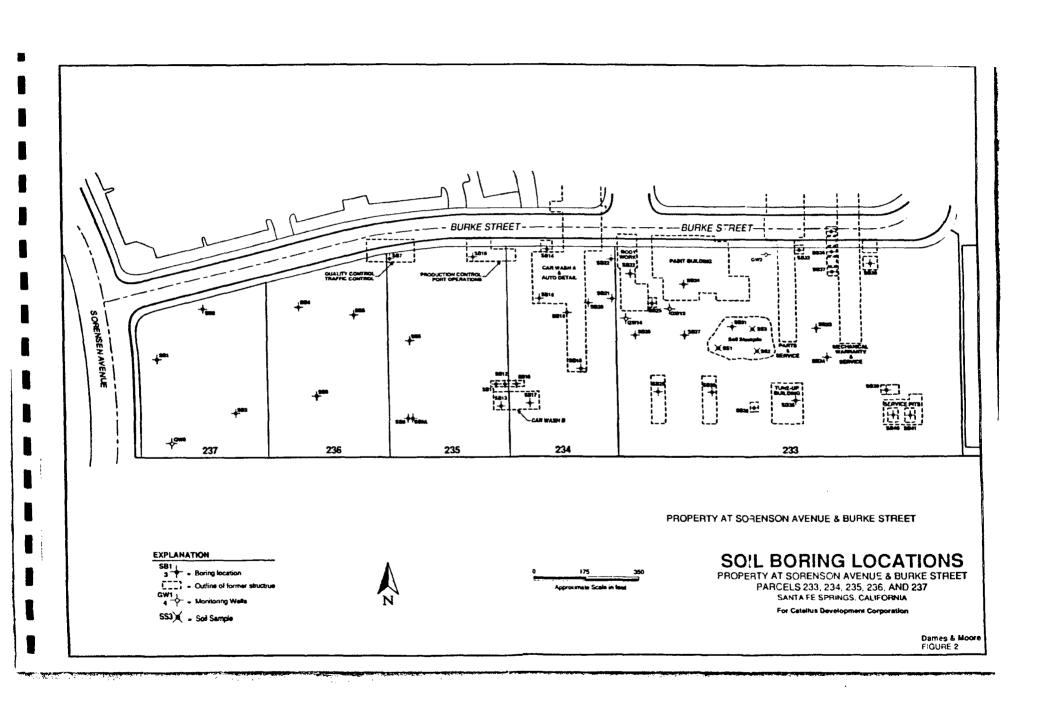
ug/L micrograms per liter

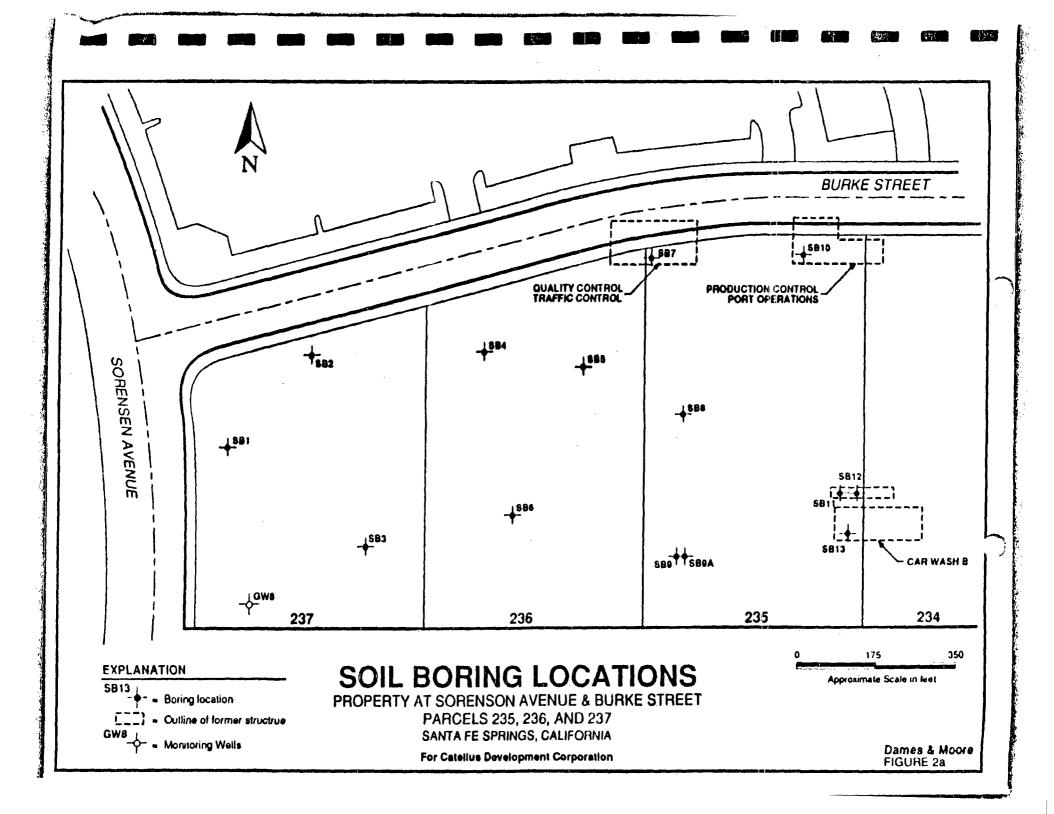
ND not detected
PCE tetrachloroethene
TCE trichloroethene

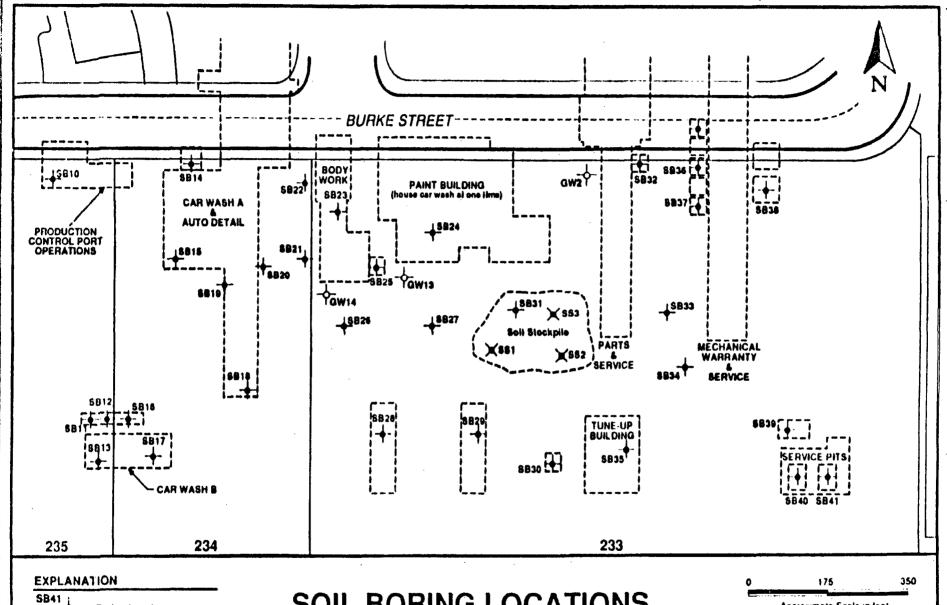
TCFM trichlorofluoromethane
1,1-DCE 1,1 dichloroethene
1,2-DCE 1,2 dichloroethene
1,2-DCA 1,2 dichloroethane

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♦ Boring location - Outline of former structrue - Monitoring Wells

SS3 _ Soil Sample

SOIL BORING LOCATIONS

PROPERTY AT SORENSON AVENUE & BURKE STREET PARCELS 235, 234, AND 233 SANTA FE SPRINGS, CALIFORNIA

For Catelius Development Corporation

Approximate Scale in leet

Dames & Moore FIGURE 2b

